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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,517	09/14/2004	Gioacchino Coppi	2541-1026	1148

466 7590 03/22/2006

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EXAMINER

CHATTOPADHYAY, URMI

ART UNIT	PAPER NUMBER
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3738

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/507,517

Applicant(s)

COPPI, GIOACCHINO

Examiner

Urmi Chattopadhyay

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 September 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/14/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The Information Disclosure Statement filed September 14, 2004 has been entered. The references cited have been considered. An initialed and signed copy of the IDS is enclosed.

### ***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "1" for prosthesis mentioned on page 3, line 21 is not shown in the drawings. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The word "comprises" is legal phraseology that needs to be removed from the abstract.

5. The disclosure is objected to because of the following informality: on page 1, line 19, "haemorrhaging" should be changed to either --haemorrhaging-- or --hemorrhaging--.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Nunez et al. (USPN 5,800,514).

Nunez et al. disclose a prosthesis for large blood vessels with all the elements of claim 1.

See Figure 18 and columns 13-14, lines 62-4 for the prosthesis (900) comprising a main conduit

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(917) with one tract subdivided into a plurality of small conduits (930a, 930b, 930c) located parallel one to another.

Claim 2, see Figure 18 for each of the small conduits (930a, 930b, 930c) having an internal caliber that is smaller than the internal caliber of the main conduit (917).

Claim 3, see Figure 18 for an overall section, which is the sum of sections of the small conduits (30a, 930b, 930c) being *approximately* equal to a section of the main conduit (917). The word “approximately” broadens scope of the claim to include overall sections that are not exactly equal to the main conduit section.

Claims 4 and 5, see Figure 18 for the small conduits (930a, 930b, 930c) being three in number and independent one from another.

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nunez et al.

Nunez et al. disclose a prosthesis for large blood vessels in Figure 18 with all the elements of claim 5, but are silent to the additional limitation of one of the small conduits exhibiting a greater caliber than the other two small conduits, as required by claim 6. Nunez et al. disclose another embodiment in Figure 16, wherein a first small conduit (730b) exhibits a greater caliber than a second small conduit (730a). Because the small conduits (730a, 730b) in

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Figure 16 are for the two iliac branches, and two of the small conduits (930a, 930b) in Figure 18 are also for the two iliac branches, it would have been obvious to one of ordinary skill in the art to make one (either 930a or 930b) of the three small conduits exhibit a greater caliber than the other two. See column 13, lines 42-45 and column 14, lines 1-4.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nunez et al. in view of Greenhalgh (USPAP 2002/0058992).

Nunez et al. disclose a prosthesis for large blood vessels with all the elements of claim 6, but are silent to the additional limitation of the bio-compatible material exhibiting a small elastic deformability in a transversal direction thereof and a greater elastic deformability in a longitudinal direction thereof, as required by claim 7. See column 10, lines 12-14 for the main conduit (917) and the small conduits (930a, 930b, 930c) being made from a woven biocompatible material. Greenhalgh teaches a woven prosthesis (66) for large blood vessels (70) with a main body (78) having a tract subdivided into small conduits (80, 82), wherein the prosthesis (600) is made from many of the same biocompatible materials as Nunez et al. See Figure 8, [0050] and [0054]. The biocompatible material exhibits a small elastic deformability in a transversal direction in region (94) (as opposed to regions 88, 90 and 92) in order to maintain its diameter under the hydraulic pressure of the blood as it is pumped through the artery and prevent the region (94) to expand and place pressure on the artery at the aneurysm. See [0044] and [0051]. Greenhalgh also teaches the biocompatible material exhibiting a greater elastic deformability in a longitudinal direction in regions (96, 98) than in regions (88, 94) in order to permit the small conduits (80, 82) to follow the curvature of the iliac arteries (72, 74) without

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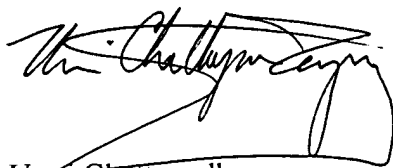
folding on the inside of the curve or kinking on the outside of the curve. See [0052] and [0057].

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the prosthesis of Nunez et al. by making the biocompatible material exhibit a small elastic deformability in a transversal direction and a greater elastic deformability in a longitudinal direction according to the teachings of Greenhalgh. This will allow main body (917) to maintain its diameter and prevent the main body from expanding and placing pressure on the artery at the aneurysm. This will also permit at least the small conduits (930a, 930b) to follow the curvature of the iliac arteries without folding or kinking.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Urmi Chattopadhyay whose telephone number is (571) 272-4748. The examiner can normally be reached Monday through Thursday and every other Friday from 9:00am to 6:30pm.

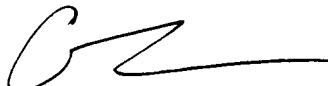
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached at (571) 272-4754. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Urmi Chattopadhyay

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**CORRINE McDERMOTT**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 3700**